

LANDSCAPE ARCHITECTS . S

MGINEERS . PLANNERS . ARCHITECTS . LANDSCAPE 7777 LEESBURG PIKE, SUITI FALLS CHURCH, VA 22043 PH: (

ETT STREET
ASON RD

3404 HOCKET LOT 58A, MAS

NO LY J

HAMID
HAMID
MOGHAVEMI-TEHRANI
Lic. No. 23137

3 123/201/155

OVAL ENGINEERS

DESIGNED BY:

SDE, INC.

DRAWN BY: B.H.

CHECKED BY: HAMID T., PE

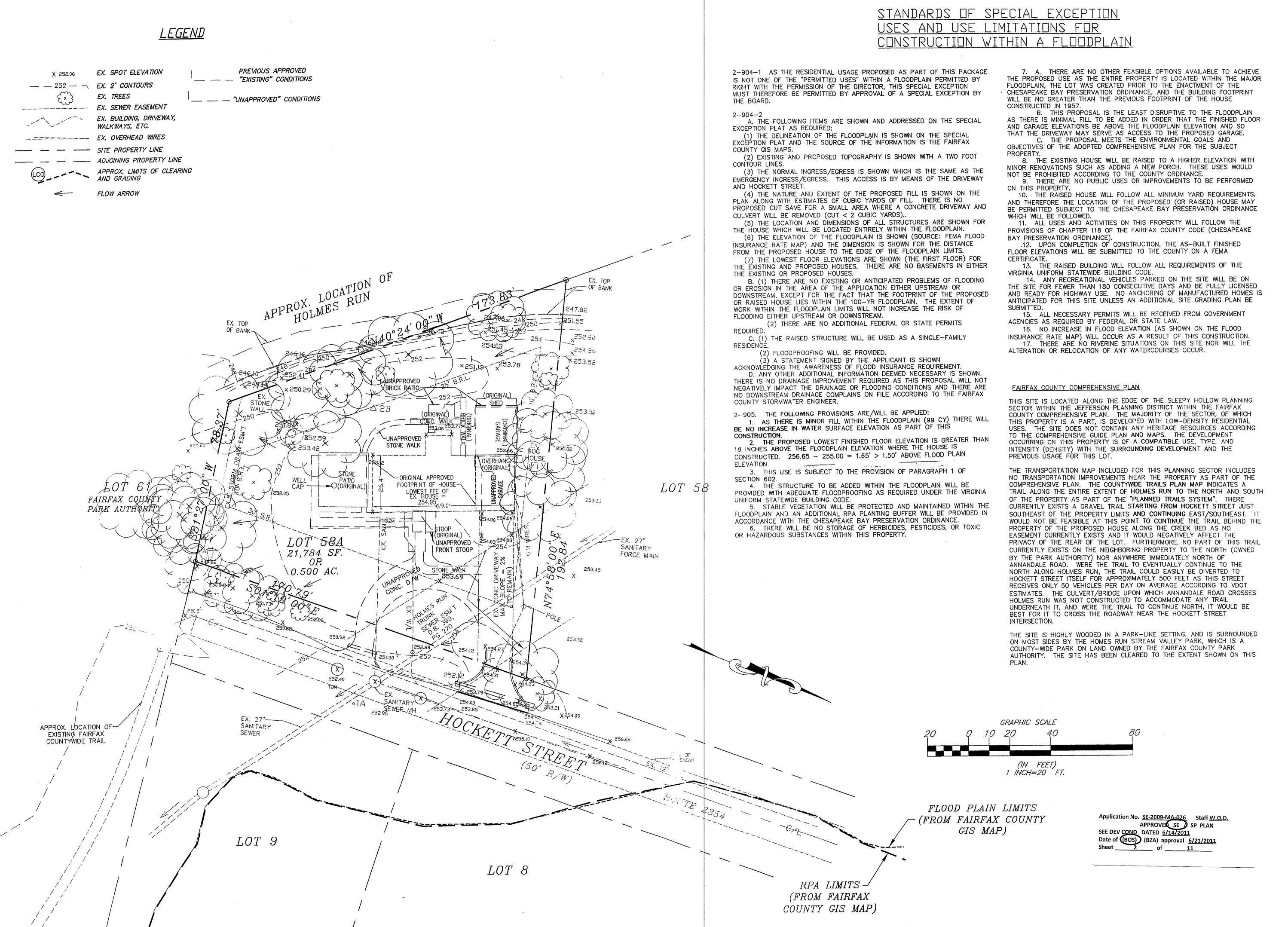
SCALE: 1":20'

DATE: 03/23/2011

PROJECT/FILE #

SHEET NUMBER

1 OF 7



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SPECIAL
EXCEPTION PLAT
(EXISTING AND
UNAPPROVED
CONDITIONS)

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1.1 OF 7

<u>GENERAL NOTES</u>
1. TAX MAP #: 60-1-((1))-58A
2. TOTAL PROPERTY ACREAGE: 21,784 SF OR 0.500 AC
3. TOTAL DISTURBED AREA: 19,945 SF OR 0.458 AC
4. WATERSHED FOR SUBJECT PROPERTY: CAMERON RUN
5. ZONE: <u>R-4</u>
SETBACKS: FRONT: 30' SIDE: 10' REAR: 25' MAX. BUILDING HEIGHT: 35'
6. NO TITLE REPORT HAS BEEN FURNISHED TO THIS FIRM, THEREFORE THIS PLAN DOES NOT PURPORT TO IDENTIFY OR SHOW ALL POSSIBLE EASEMENTS OR INCUMBRANCES.
7. ALL CONSTRUCTION SHALL CONFORM TO FAIRFAX COUNTY AND VIRGINIA DEL ARTIMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS WHERE APPLICABLE.
8. PROFFERED OR CONDITIONED SITE: YES NO
9. WATER SUPPLY PUBLIC WELL
10. SEWER SERVICE PUBLIC PRIVATE
10. SEWER SERVICE 11. BOUNDARY BY: REALTY TITLE SERVICES, INC. DATE: NOVEMBER 2000 MARCH 2009
12. TOPO BY: SDE, INC. DATE:
13. TOPO DATUM: U.S.G.S AND CONTOUR INTERVAL 2'
14. CONSTRUCTION LOCATED WITHIN:
SI OPES OVER 15%
R.P.A. (REFER SHEET 5 FOR APPROVED RPA-WAIVER) YES NO
R.M.A.
OVERLAY DISTRICT
WETLANDS YES NO
15. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO THE LATEST EDITION OF THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" AND AS MODIFIED BY FAIRFAX COUNTY CODE 104—1—8.
16. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO KNOWN GRAVE SITES ON THIS PROPERTY.
17. THIS LOT RECORDED PRIOR TO AUGUST 1, 1978 AND AS SUCH IS NOT REQUIRED TO MEET CURRENT LOT WIDTH AND SIZE REQUIREMENTS UNDER FAIRFAX COUNTY ZONING ORDINANCE, ARTICLE 2-405.
TOUR OF DEED FUETAV

18. FOR SLOPES 3:1 OR GREATER PERMANENT GROUND STABILIZATION COVER PER FAIRFAX COUNTY PFM SECTION 6-1503.4 SHALL BE PROVIDED TO PREVENT EROSION OF THE SLOPE BANKS. NO SLOPES GREATER THAN 2:1 ARE PERMITTED. MINIMUM 2% GRADE REQUIRED FOR ALL GRADED AREAS OF THE LOT.

19. CONTRACTOR TO STAKE OUT THE PROPERTY LINE WHERE CLEARING AND GRADING LIMITS ARE COINCIDENT OR ADJACENT TO THE PROPERTY LINE. 20. CONTRACTOR TO ENSURE NO SEDIMENT IS CONVEYED ONTO OFFSITE PROPERTIES AND

FOR THE STABILIZATION OF ALL DISTURBED AREAS. 21. ALL UTILITIES CONNECTIONS ARE IN PLACE. THEREFORE NO NEW UTILITIES

CONNECTIONS ARE PROPOSED BY THIS DEVELOPMENT UNLESS IT IS DEEMED

22. CONTRACTOR TO MAINTAIN POSITIVE SURFACE FLOW AWAY FROM BUILDING IN ACCORDANCE WITH BUILDING CODE. BUILDING TO BE PROPERLY WATERPROOFED BY
THE CONTRACTOR IN ACCORDANCE WITH BUILDING CODE.

23. CONTRACTOR SHALL VERIFY ALL GRADES WITHIN PROJECT SITE PRIOR TO CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY DESIGN ENGINEER OF ANY
DISCREPANCIES BETWEEN FIELD ELEVATIONS AND ELEVATIONS ON THIS PLAN.

24. NO SUBSURFACE INVESTIGATION HAS BEEN MADE BY THIS COMPANY FOR THE SUBJECT PROPERTY.

25. CONTRACTOR SHALL INSTALL TEMPORARY TREE PROTECTION AROUND EXISTING TREES AND TAKE CARE DURING CONSTRUCTION AND GRADING ACTIVITIES. NO LIVING TREES ARE TO BE REMOVED DURING CONSTRUCTION IF POSSIBLE. DEAD TREES ARE TO BE REMOVED. SEE TREE PRESEVATION PLAN AND EXISTING VEGETATION MAP (SHEETS 7, 8, AND 9) FOR FURTHER NOTES AND DETAILS.

26. NO HAZARDOUS OR TOXIC SUBSTANCES WILL BE GENERATED, UTILIZED, STORED, TREATED, OR DISPOSED OF NOR HAVE BEEN OBSERVED ON THE SUBJECT PROPERTY.

27. EXISTING TOPOGRAPHICAL SURVEY IS A FIELD RUN SURVEY PREPARED IN 2 FEET CONTOUR INTERVAL.

28. ALL EXISTING UTILITY EASEMENTS HAVING A WIDTH OF TWENTY FIVE (25) FEET OR MORE ARE SHOWN ON THIS PLAT.

EXISTING PROPERTY OWNER

NAME: GOSSOM FAMILY LIMITED PARTNERSHIP I ADDRESS: 3404 HOCKETT STREET, FALLS CHURCH 22042 D.B. 21124, PAGE 0488

VDOT NOTE

1. METHODS AND MATERIALS USED SHALL CONFORM TO CURRENT COUNTY/TOWN AND VDOT STANDARDS AND SPECIFICATIONS.

2. THE DEVELOPER IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING ROADS AND UTILITIES WHICH OCCUR AS A RESULT OF PROJECT CONSTRUCTION WITHIN OR CONTIGUOUS TO THE EXISTING RIGHT-OF-WAY.

4. OVERLAY OF EXISTING PAVEMENT SHALL BE MINIMUM OF 1.25" DEPTH; ANY COSTS ASSOCIATED WITH PAVEMENT OVERLAY, OR THE MILLING OF EXISTING PAVEMENT TO OBTAIN REQUIRED DEPTH, SHALL BE ASSUMED BY THE DEVELOPER.

5. ALL DAMAGES TO EXISTING ROAD AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE THE RESPONSIBILITY OF THE DEVELOPER/CONTRACTOR AND WILL BE RESTORED TO THE SATISFACTION OF VIRGINIA DEPARTMENT OF TRANSPORTATION. PAVEMENT PATCH FOR UTILITY SERVICE SHALL BE IN ACCORDANCE WITH VDOT STANDARDS.

6. EXISTING DRIVEWAY WILL BE USED FOR PROPOSED REDEVELOPMENT BUILDING. NO NEW CURB CUT IS NECESSARY FOR THIS PROJECT.

EXISTING UTILITY NOTE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK AND FOR ANY DAMAGES WHICH OCCUR BY HIS FAILURE TO LOCATE OR PRESERVE THESE UNDERGROUND UTILITIES. IF, DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR ENCOUNTERS UTILITIES OTHER THAN THOSE INDICATED BY MISS UTILITY & MEMBER UTILITY COMPANIES, HE SHALL IMMEDIATELY NOTIFY THE ENGINEER AND OWNER AND TAKE NECESSARY AND PROPER STEPS TO PROTECT THE FACILITY AND ASSURE THE CONTINUANCE OF SERVICE.

THE CONTRACTOR IS REQUIRED BY LAW TO NOTIFY MISS UTILITY (1-800-552-7001) AT LEAST 48 HOURS IN ADVANCE OF ANY WORK ON THIS PROJECT.

LEGAL LOT CERTIFICATE

I HEREBY CERTIFY THAT ALL APPROPRIATE COUNTY APPROVALS WERE OBTAINED IN ACCORDANCE WITH THE PROCESS REQUIRED BY THE SUBDIVISION ORDINANCE IN EFFECT AT THE TIME OF THE CREATION OF MASON RD, LOT 58A. THE LOT WAS APPROVED BY FAIRFAX COUNTY AND RECORDED IN DEED BOOK 20291. PAGE 2033 AND RECORDED PRIOR TO MARCH 1, 1978
AMONG THE LAND RECORD OF FAIRFAX COUNTY.

RESPONSIBLE LAND DISTURBER CERTIFICATION Effective July 1, 2001.

Amendments to the Virginia Erosion Sediment Control Law, 10.1-563 and 10.1-566 of the code of Virginia

OWNER/DEVELOPER/ INFORMATION PROJECT NAME: 3404 HOCKETT STREET PROJECT #:

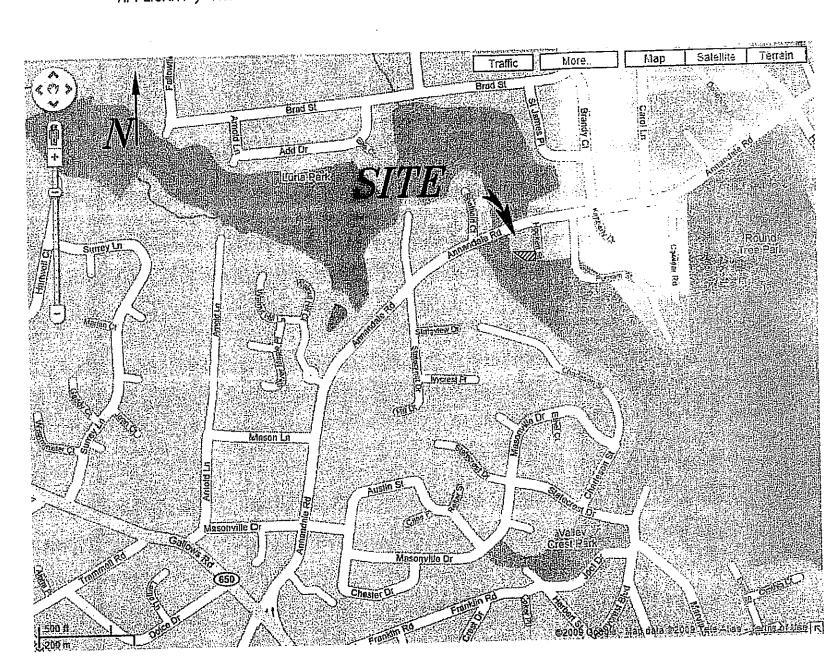
DISTRICT: MASON TAX MAP AND PARCEL #: 06-01 ((1)) 58A

OWNER/DEVELOPER/ PERMITTEE: NAME: GOSSOM FAMILY LIMITED PARTNERSHIP |
ADDRESS: 3404 HOCKETT STREET
FALLS CHURCH, VA 22042

RESPONSIBLE LAND DISTURBER INFORMATION

CERTIFICATE /
LICENSE HOLDER NAME: _____ PHONE : ADDRESS:

CERTIFICATE / LICENSE TYPE OF CERTIFICATE: ___ APPLICANT / AGENT SIGNATURE .



VICINITY MAP (N.T.S.)

IMPERVIOUS ACREAGE

		DEVELOPMENT LEVEL		IMPERVIOUSNESS ACREAGE COMPUTATION			
DESCRIPTIO	NS	PRE	POST	PRE	POST		54 <u>00</u>
SITE AREA IN ACRE		A1	A2	0.500	0.500		53 <u>10</u> ×
COMPOSITE RATION	AL C FACTOR	C1	C2	0.430	0.35	4	(3)
FRACTIONAL IMPER		11	12	0.28	0.16		(3)
TOTAL IMPERVIOUS	ACRES	(A1x11)	(A2xI2)	0.140	0.079	5370	
DECREASE IN IMPE	RVIOUS ACRES	(A2xI2) - (A1xI1)		0.0	62	53 <u>70</u> 53 <u>16</u> ×	(2)

STORMWATER RUNOFF CALCULATIONS:

IMPERVIOUS C- FACTOR = 0.90 PERVIOUS C-FACTOR = 0.25TIME OF CONCENTRATION = 5 MIN RAINFALL INTENSITY, 12 = 5.45 IN/HR RAINFALL INTENSITY, 110 = 7.27 IN/HR

IMPERVIOUS AREA COMPUTATIONS

	EXISTING (ORIGINAL PERMIT)	(UNAPPROVED	POST-DEVELOPMENT
HOUSE & PORCH	2,049*	CONDITIONS) 2,064	2,192
WALKWAYS & PATIO	1.031	1,782	132
DRIVEWAY	1,636	2,270	1,101
	4,716	6,116	3,425
PERVIOUS AREA	1 <i>7,068</i>	15,668	18,359
TOTAL LOT AREA	21,784	21,784	21,784
	HOUSE AND 610 SE	- DETACHED	GAR AGE

* INCLUDES 1439 SF HOUSE AND 610 SF DETACHED GARAGE TOTAL LOT AREA + 21,784 SF OR 0.4999 ACRE

 $\times 100\%) = 15.72\%$

DECREASE IN IMPERVIOUSNESS = 2,681 SF TOTAL PERCENTAGE OF IMPERVIOUSNESS =

A. PRE-DEVELOPMENT= $(6116 \times 0.9 + 15668 \times 0.25) = 0.43$

B. POST-DEVELOPMENT

 $= (3425 \times 0.9 + 18359 \times 0.30) = 0.35$

EXISTING (OVERALL)

(5 MIN Tc) Q2 = ($0.430 \times 5.45 \times 0.500$) = 1.18 CFS (5 MIN Tc) Q1 p = ($0.430 \times 7.27 \times 0.500$) = 1.57 CFS

POST-DEVEL OPMENT (OVERALL) (5 MIN Tc) Q2 = ($0.35 \times 5.45 \times 0.500$) = 0.96 CFS (5 MIN Tc) Q10 = ($0.35 \times 7.27 \times 0.500$) = 1.28 CFS

POST DEVELOPMENT CHANGE IN RUNOFF 2-YEAR 0.96 - 1.18 = 0.22 CFS DECREASE 10-YEAR 1.28 - 1.57 = 0.29 CFS DECREASE

CBPO NOTES THIS PLAN COMPLIES FULLY WITH AMENDMENT CHAPTER 118 (CHESAPEAKE BAY PRESERVATION ORDINANCE) OF THE CODE OF THE COUNTY OF FAIRFAX, EFFECTIVE NOV. 18, 2003.

WETLANDS CERTIFICATE

I HEREBY CERTIFY THAT ALL WETLANDS PERMITS REQUIRED BY LAW WILL BE OBTAINED PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITIES.

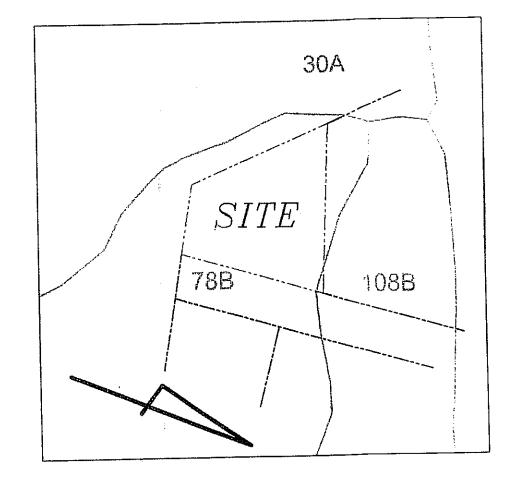
SIGNATURE: (LOSEN WILLIAM DATE: (0/20) 2010 OWNER NAME/ ROBERT WILKINS

Approved SE Staff <u>W.O.D.</u>

APPROVED SE SP PLAN

Date of (BOS) (BZA) approval 6/21/2011

SEE DEV COND DATED 6/14/2011



SOILS MAP (N.T.S.)

MAP UNIT SYMBOL	MAP UNIT NAME	% OF SITE	FOUNDATION SUPPORT	SUBSURFACE DRAINAGE	SLOPE STABILITY	ERODABILITY	PROBLEM CLASS, OLD	PROBLEM CLASS, NEW
700	MEADOWVILLE, 2-7%	99%	FAIR	MARGINAL	FAIR	MODERATE	В	11
78B 108B	WHEATON-SUMERDUCK, 2-7%	1%	MARGINAL	POOR	FAIR	MODERATE	А	IVB

53<u>07</u>

53*70* X

BUILDING HEIGHT CERTIFICATION

SCALE: 1"=20'

FRONT ELEVATION

N.T.S.

BUILDING HEIGHT = 280.39 - 253.53 = 26.86

SHEET INDEX

1. SPECIAL EXCEPTION PLAT

1.1 SPECIAL EXCEPTION PLAT (EXISTING AND UNAPPROVED CONDITIONS) 2. GENERAL NOTES

3. SITE GRADING PLAN.

4. EROSION & SEDIMENT CONTROL AND DEMOLITION PLAN

5. E & S CONTROL NOTES AND DETAILS 6. STORMWATER MANAGEMENT & OUTFALL ANALYSIS

EXISTING VEGETATION MAP 7.1. TREE CONSERVATION PLAN

7.2. TREE CONSERVATION NOTES 7.3. RPA BUFFER PLANTING PLAN

EXISTING

253.24

253.16

253.10

253.07

253.70

253.60

253.80

254.06

254.00

10 253.60

<u>5380</u>

26.86' < 35' (GOOD)

POINT ELEVATION

PROPOSED

ELEVATION

254.00

253.70

254.00

254.30

254.30

254.30

256.00

256.65

255.50

254.25

254.70

HIGHEST ROOF=286.09'

MID-ROOF=280.39'

EAVE=274.68

GFE=256.65

MIN. AVERAGE GRADE :

SUITE 305N PH: (703) 55

HO

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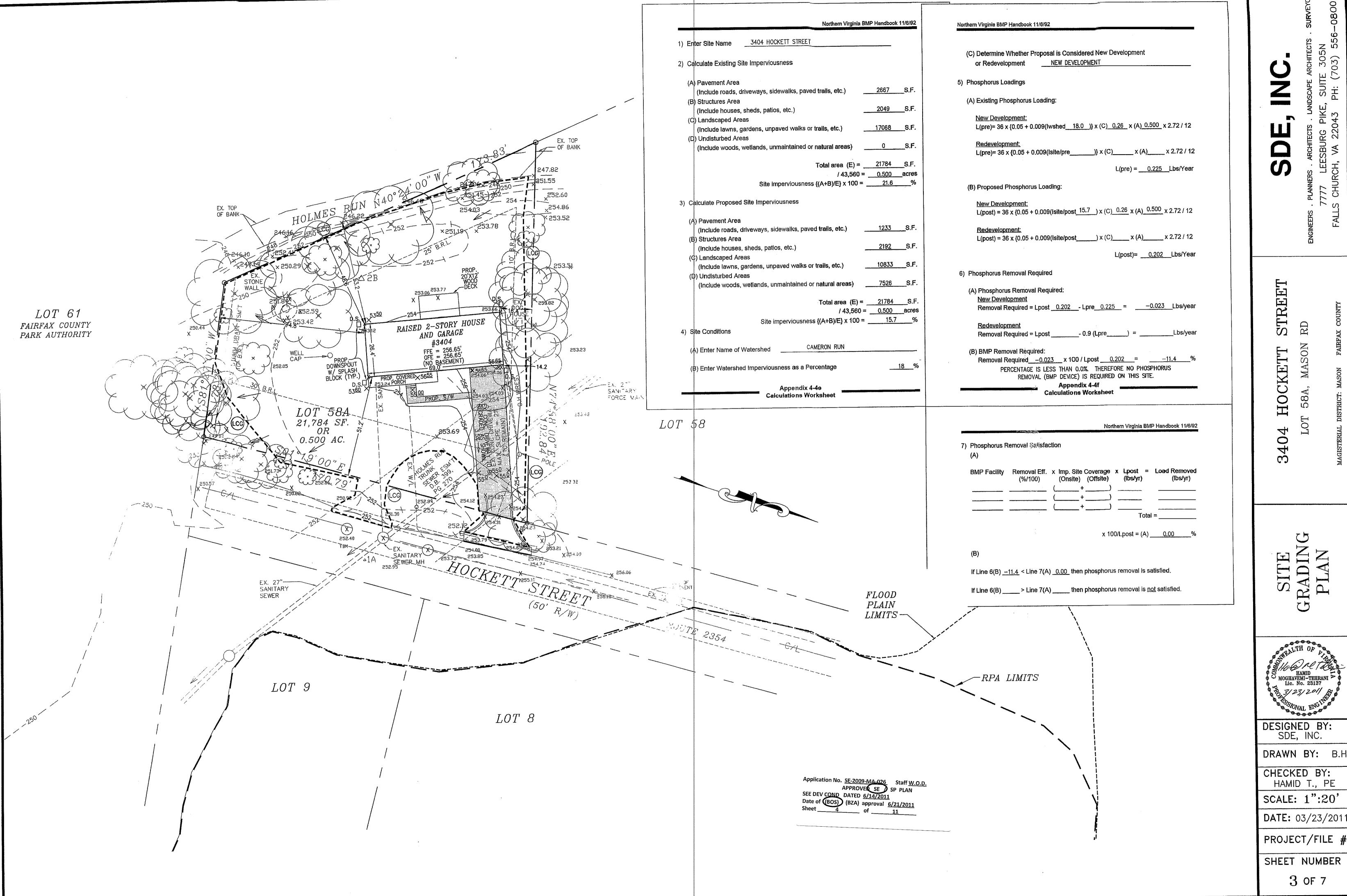
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2 OF 7

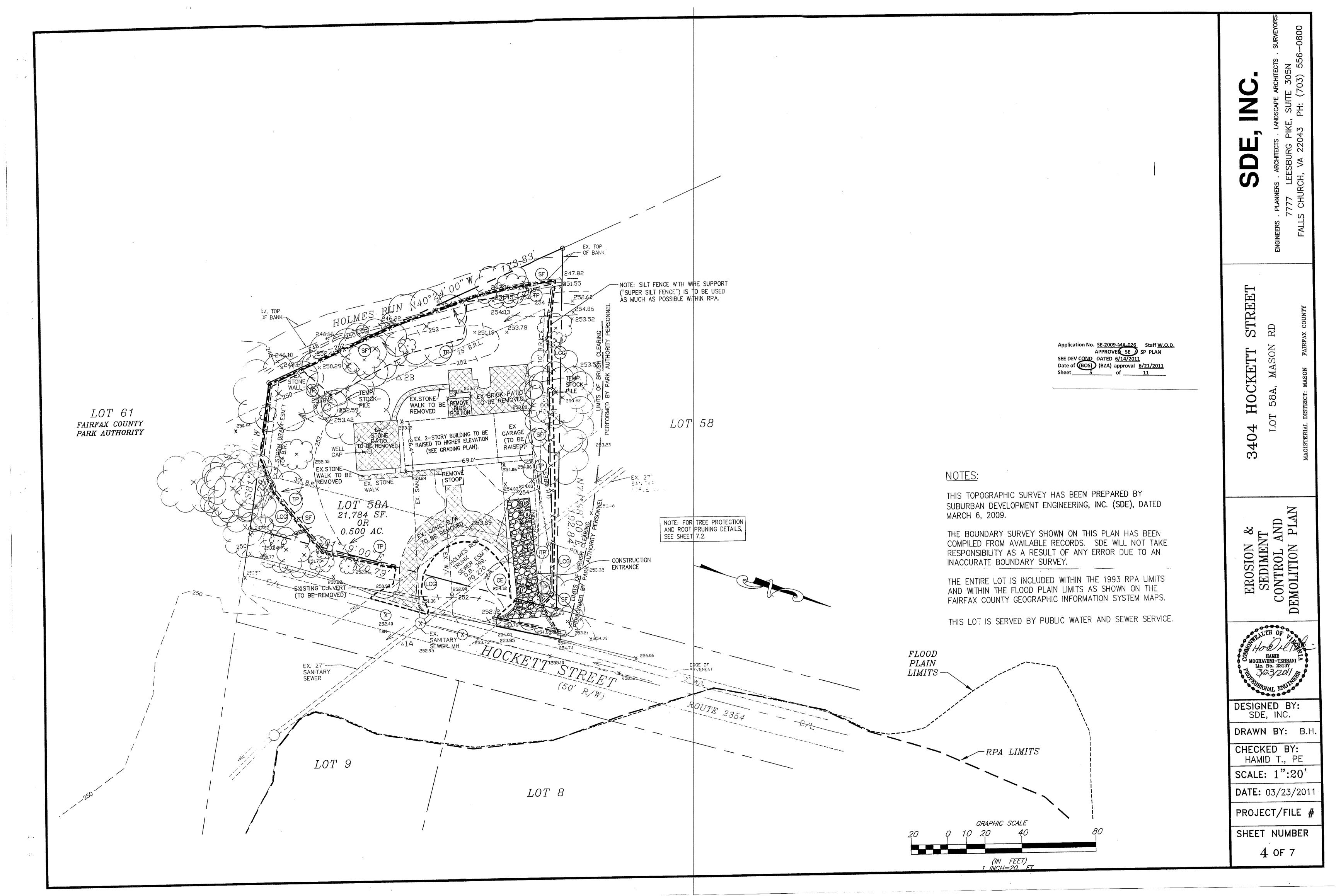


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THIS PROJECT INVOLVES THE RAISING THE EXISTING HOUSE ON THE SITE TO A HIGHER ELEVATION ALONG WITH THE GARAGE ELEVATION. A NEW FRONT PORCH AND A REAR WOODEN DECK WILL BE

THE EXISTING CONCRETE DRIVEWAY WILL BE USED WITH A CIRCULAR PORTION REMOVED ALONG WITH OTHER IMPERVIOUS ACCESORIES SUCH AS PATIOS AND WALKWAYS. THE SITE WILL INVOLVE MINIMAL REGRADING, AND A NEW PLANTING BUFFER WILL BE INSTALLED ALONG THE DOWNSTREAM

PHASE I EROSION AND SEDIMENT CONTROL PROGRAM:

1. INSTALL A CONSTRUCTION ENTRANCE.

2. INSTALL SILT FENCE FENCE AND TREE PROTECTION FENCE ALONG THE LIMIT OF DISTURBANCE AS

3. CLEAR AND ROUGH GRADE AS NECESSARY AS INDICATED ON THE PLANS. 4. PERFORM STABILIZATION SUCH AS PERMANENT SEEDING FOR ALL DENUDED AREAS

EXISTING SITE CONDITIONS

THE TOTAL SITE AREA IS 0.500 ACRES AND 0.458 ACRES WILL BE DISTURBED. THE DISTURBED AREA IS CURRENTLY DEVELOPED WITH A VACANT HOUSE. THE SLOPES ON THE SITE ARE RELATIVELY FLAT (<2%) WITH SLIGHTY STEEPER SLOPES ALONG THE EDGE OF THE SITE NEAR HOLMES RUN. THE SITE IS GRASSY AND SLIGHTLY WOODED. THERE IS AN EXISTING SANITARY EASEMENT TOWARDS THE FRONT OF THE LOT WHICH WILL NOT BE AFFECTED BY THIS HOUSE CONSTRUCTION.

ADJACENT AREAS

THE SITE IS SURROUNDED BY LAND OWNED BY THE FAIRFAX COUNTY PARK AUTHORITY, OTHER HOMES ZONED R-4. AND BY HOCKETT STREET IN THE FRONT.

NO OFF-SITE DISTURBANCE IS PROPOSED WITH THIS DEVELOPMENT SAVE FOR SMALL AREAS OF DISTURBANCE IN THE RIGHT-OF-WAY OF HOCKETT STREET ..

THE SOILS ON THE SITE WITH DESCRIPTIONS AND CHARACTERISTICS ARE SHOWN ON SHEET 1 OF THIS

THE ENTIRE LOT (AND DISTURBED AREA) IS WITHIN THE RPA LIMITS AND WITHIN THE 100-YEAR FLOOD PLAIN LIMITS AND IS THEREFORE CONSIDERED A CRITICAL AREA. EROSION AND SEDIMENT CONTROL MEASURES WILL THEREFORE BE TAKEN BY MEANS OF SUPER SILT FENCES ALONG THE PERIMETER OF THE DISTURBED AREA.

PERMANENT SEEDING

PERMANENT SEEDING SHALL BE PERFORMED IN ACCORDANCE WITH VESCH SPECIFICATION 3.32. 1. PERMANENT VEGETATION COVER MUST MEET THE REQUIREMENTS OF MINIMUM STANDARDS #3 (MS-3). 2. PLANT SELECTION SHALL BE BASED UPON TABLES 3.32 A&B DEPENDING ON CLIMATE, TOPOGRAPHY, SOILS. AND SITE CONDITIONS.

3. THE PLANTING SOIL MUST HAVE ENOUGH FINE GRAINED SOIL, SUFFICIENT PORE SPACE. SUFFICIENT DEPTH AND BE FREE FROM TOXIC OR EXCESSIVE QUANTITIES OF ROOTS AND SHALL BE APPLIED IN ACCORDANCE WITH VESCH STD 3.30.

STANDARDS AND SPECIFICATIONS FOR DUST CONTROL

1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND MAINTAIN THE PROJECT SITE AS TO MINIMIZE THE CREATION AND DISPERSION OF DUST. DUST CONTROL SHALL BE USED THROUGHOUT THE WORK AT

2. THE CONTRACTOR MUST PROVIDE CLEAN WATER, FREE FROM SALT, OIL AND OTHER DELETERIOUS MATERIAL TO BE USED FOR ON-SITE DUST CONTROL.

3. THE CONTRACTOR SHALL SUPPLY WATER SPRAYING EQUIPMENT CAPABLE OF ACCESSING ALL WORK AKEAS.
4. THE CONTRACTOR SHALL IMPLEMENT STRICT DUST CONTROL MEASURES DURING ACTIVE CONSTRUCTION PERIODS ON-SITE. THESE CONTROL MEASURES WILL GENERALLY CONSIST OF WATER APPLICATIONS THAT SHALL BE APPLIED A MINIMUM OF ONCE PER DAY DURING DRY WEATHER OR MORE OFTEN AS REQUIRED

TO PREVENT DUST EMISSIONS. 5. FOR WATER APPLICATION TO UNDISTURBED SOIL SURFACES, THE CONTRACTOR SHALL;

A. APPLY WATER WITH EQUIPMENT CONSISTING OF TANK, SPRAY BAR, PUMP WITH DISCHARGE B. ARRANGE SPRAY BAR HEIGHT, NOZZLE SPACING AND SPRAY PATTERN TO PROVIDE COMPLETE COVERAGE OF GROUND WITH WATER.

C. DISPERSE WATER THROUGH NOZZLES ON SPRAY BAR AT 20 PSI (137.8 K Pa) MINIMUM. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.

6. FOR WATER APPLICATION TO SOIL SURFACES DURING DEMOLITION AND/OR EXCAVATION, THE CONTRACTOR SHALL;

A. APPLY WATER WITH EQUIPMENT CONSISTING OF A TANK, PUMP WITH DISCHARGE GAUGE, HOSES AND MIST NOZZLES.

B. LOCATE TANK AND SPRAYING EQUIPMENT SO THAT THE ENTIRE EXCAVATION AREA CAN BE MISTED WITHOUT INTERFERING WITH DEMOLITION AND/OR EXCAVATION EQUIPMENT OR OPERATIONS. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.

C. APPLY WATER SPRAY IN A MANNER TO PREVENT MOVEMENT OF SPRAY BEYOND THE SITE BOUNDARIES.

SILT FENCE

SILT FENCE SHALL COMPLY WITH VESCH CHAPTER 3 PAGES 21-22. 1. SYNTHETIC FILTER FABRIC SHALL BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER, OR ETHYLENE YARN AND SHALL BE CERTIFIED BY MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS NOTED IN TABLE 3.05-B OF THE VESCH.

2. SYNTHETIC FILTER FABRIC SHALL CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF SIX MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF O DEGREES FAHRENHEIT TO 120 DEGREES FAHRENHEIT.

3. IF WOODEN STAKES ARE UTILIZED FOR SILT FENCE CONSTRUCTION, THEY MUST HAVE A DIAMETER OF 2" WHEN OAK IS USED AND 4" WHEN PINE IS USED. WOODEN STAKES MUST HAVE A MINIMUM LENGTH OF 5'.

4. IF STEEL POSTS (STANDARD "U" AND "T" SECTION) ARE UTILIZED FOR SILT FENCE CONSTRUCTION,

MINIMUM LENGTH OF 5'. 5. WIRE FENCE REINFORCEMENT FOR SILT FENCE USING STANDARD STRENGTH FILTER CLOTH SHALL

THEY MUST HAVE A MINIMUM WEIGHT OF 1.33 POUNDS PER LINEAR FOOT AND SHALL HAVE A

BE A MINIMUM OF 14 GAUGE AND SHALL HAVE A MAXIMUM MESH SPACING OF 6".

6. THE HEIGHT OF A SILT FENCE SHALL BE A MINIMUM OF 16" ABOVE THE ORIGINAL GROUND SURFACE AND SHALL NOT EXCEED 34" ABOVE GROUND ELEVATION. NOTE: SILT FENCE SHOULD BE USED FOR DRAINAGE AREAS THAT ARE NO LARGER THAN 0.25 ACRES PER 100' OF SILT FENCE LENGTH. THE MAXIMUM SLOPE LENGTH BEHIND THE BARRIER IS 100'. THE MAXIMUM GRADIENT BEHIND THE BARRIER IS 2:1. SILT FENCE IS BEST USED WHEN THE SLOPE ABOVE THE FENCE, EITHER CUT OR FILL, IS NOT STEEPER THAN 3:1.

TREE PROTECTION (REF. PFM PLATES 5-12 & 6-12):

TREE PROTECTION FENCING WILL BE INSTALLED TO DESIGNATE AND PROTECT THE AREAS OF TREE PRESERVATION.

EROSION AND SEDIMENT CONTROL MINIMUM STANDARDS

(1) SOIL STABILIZATION.

* PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. * TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS, BUT LESS THAN ONE YEAR

* PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE

(2) SOIL STOCKPILE STABILIZATION. DURING CONSTRUCTION, SOIL STOCKPILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. TEMPORARY PROTECTION AND PERMANENT STABILIZATION SHALL BE APPLIED TO ALL SOIL STOCKPILES ON SITE AND BORROW AREAS OR SOIL INTENTIONALLY

(3) PERMANENT STABILIZATION, PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS: * UNIFORM * MATURE ENOUGH TO SURVIVE

4) SEDIMENT BASINS & TRAPS. SEDIMENT BASINS, SEDIMENT TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS, AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE. (5) STABILIZATION OF EARTHEN STRUCTURES . STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES, AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION. (6) SEDIMENT TRAPS & SEDIMENT BASINS . SEDIMENT TRAPS AND BASINS SHALL BE DESIGNED AND CONSTRUCTED

BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN AS FOLLOWS: SEDIMENT TRAPS * ONLY CONTROL DRAINAGE AREAS LESS THAN THREE ACRES * MINIMUM STORAGE CAPACITY OF 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA SEDIMENT BASINS: * CONTROL DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES

* MINIMUM STORAGE CAPACITY OF 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA * THE OUTFALL SYSTEM SHALL, AT A MINIMUM, MAINTAIN THE STRUCTURAL INTEGRITY OF THE BASIN DURING A TWENTYFIVE YEAR STORM OF 24-HOUR DURATION (7) CUT AND FILL SLOPES DESIGN & CONSTRUCTION. CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM

(8) CONCENTRATED RUNOFF DOWN SLOPES. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME, OR SLOPE DRAIN STRUCTURE. (9) SLOPE MAINTENANCE, WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION

(10) STORM SEWER INLET PROTECTION . ALL STORM SEWER INLETS MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE STORMWATER CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED/TREATED TO REMOVE SEDIMENT.

(11) STORMWATER CONVEYANCE PROTECTION. BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND THE RECEIVING CHANNEL. (12) WORK IN LIVE WATERCOURSE. W HEN WORK IN A LIVE WATERCOURSE IS PERFORMED: * PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT, AND STABILIZE

THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION * NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS (13) CROSSING LIVE WATERCOURSE. WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX-MONTH PERIOD, A TEMPORARY VEHICULAR STREAM CROSSING CONSTRUCTED OF NONERODIBLE

MATERIAL SHALL BE PROVIDED. (14) REGULATION OF WATERCOURSE CROSSING. ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET. (15) STABILIZATION OF WATERCOURSE. THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY

AFTER WORK IN THE WATERCOURSE IS COMPLETED. (16) UNDERGROUND UTILITY LINE INSTALLATION . UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA: * NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME

* EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES

* EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY * MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION

AND PROMOTE STABILIZATION * RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS * COMPLY WITH APPLICABLE SAFETY REGULATIONS

(17) VEHICULAR SEDIMENT TRACKING . WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED OR PUBLIC * PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE

PAVED SURFACE * WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER (18) REMOVAL OF TEMPORARY MEASURES, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER

NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE PROGRAM AUTHORITY. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT Further erosion and sedimentation. (19) STORMWATER MANAGEMENT . PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION, AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY, AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24-HOUR DURATION IN ACCORDANCE

WITH THE FOLLOWING STANDARDS AND CRITERIA: * CONCENTRATED STORMWATER RUNOFF LEAVING A DEVELOPMENT SITE SHALL BE DISCHARGED DIRECTLY INTO AN ADEQUATE NATURAL OR MAN-MADE RECEIVING CHANNEL, PIPE, OR STORM SEWER SYSTEM. FOR THOSE SITES WHERE RUNOFF IS DISCHARGED INTO A PIPE OR PIPE SYSTEM, DOWNSTREAM STABILITY ANALYSES AT THE OUTFALL OF THE PIPE OR PIPE SYSTEM SHALL BE PERFORMED.

* ADEQUACY OF ALL CHANNELS AND PIPES SHALL BE VERIFIED: O NATURAL CHANNELS -USE 2-YEAR STORM EVENT O MANMADE CHANNELS -USE 2- AND 10-YEAR STORM EVENT O PIPE AND PIPE SYSTEMS -USE 10-YEAR STORM EVENT

* IF EXISTING NATURAL RECEIVING CHANNELS OR PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS OR PIPES ARE NOT ADEQUATE, THE APPLICANT SHALL PROVIDE CHANNEL, PIPE, OR PIPE SYSTEM IMPROVEMENT OR PROVIDE A COMBINATION OF CHANNEL IMPROVEMENT, SITE DESIGN, STORMWATER DETENTION, OR OTHER MEASURES THAT IS SATISFACTORY TO THE PROGRAM AUTHORITY TO PREVENT DOWNSTREAM EROSION.

* PROVIDE EVIDENCE OF PERMISSION TO MAKE THE IMPROVEMENTS * IF THE APPLICANT CHOOSES AN OPTION THAT INCLUDES STORMWATER DETENTION HE SHALL OBTAIN APPROVAL FROM THE LOCALITY OF A PLAN FOR MAINTENANCE OF THE DETENTION FACILITIES. THE PLAN SHALL SET FORTH THE MAINTENANCE REQUIREMENTS OF THE FACILITY AND THE PERSON RESPONSIBLE FOR PERFORMING THE MAINTENANCE. * OUTFALL FROM A DETENTION FACILITY SHALL BE DISCHARGED TO A RECEIVING CHANNEL, AND ENERGY DISSIPATORS SHALL BE PLACED AT THE OUTFALL OF ALL DETENTION FACILITIES AS NECESSARY TO PROVIDE A STABILIZED TRANSITION FROM THE FACILITY TO THE RECEIVING CHANNEL.

* INCREASED VOLUMES OF SHEET FLOWS THAT MAY CAUSE EROSION OR SEDIMENTATION ON ADJACENT PROPERTY SHALL BE DIVERTED TO A STABLE OUTLET, ADEQUATE CHANNEL, PIPE OR PIPE SYSTEM, OR TO A DETENTION FACILITY
* IN APPLYING THESE STORMWATER RUNOFF CRITERIA, INDIVIDUAL LOTS OR PARCELS IN A RESIDENTIAL, COMMERCIAL OR INDUSTRIAL DEVELOPMENT SHALL NOT BE CONSIDERED TO BE SEPARATE DEVELOPMENT PROJECTS. INSTEAD. THE DEVELOPMENT AS A WHOLE SHALL BE CONSIDERED TO BE A SINGLE DEVELOPMENT PROJECT. * ALL MEASURES USED TO PROTECT PROPERTIES AND WATERWAYS SHALL BE EMPLOYED IN A MANNER THAT MINIMIZES IMPACTS ON THE PHYSICAL, CHEMICAL AND BIOLOGICAL INTEGRITY OF RIVERS, STREAMS AND OTHER WATERS

MAINTENANCE PROGRAM

SUITABLE FOR PLACEMENT AS TOPSOIL.

1. ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED DAILY AND AFTER EACH SIGNIFICANT RAINFALL BY THE SITE SUPERINTENDENT FOR STRUCTURAL DAMAGE, EROSION, OR ANY OTHER UNDESIRABLE CONDITIONS. ANY DAMAGED STRUCTURES ARE TO BE REPAIRED IMMEDIATELY (PRIOR TO THE END OF THE WORKING DAY) INCLUDING RESEEDING AND MULCHING OR RESODDING IF NECESSARY.

2. TEMPORARILY AND PERMANENTLY SEEDED AREAS DAMAGED BY RAINFALL ARE TO BE RESEEDED AND MULCHED WITHIN TWO (2) DAYS AND WHENEVER GROUND COVER HAS NOT BEEN ADEQUATELY ESTABLISHED TO PRÉVENT EROSION.

3. ADDITIONAL SLOPE STABILIZATION MEASURES MUST BE PROVIDED FOR SLOPES WHICH ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE (1) YEAR UNTIL THE PROBLEM IS CORRECTED. 4. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN THE DEPTH IS EQUAL TO

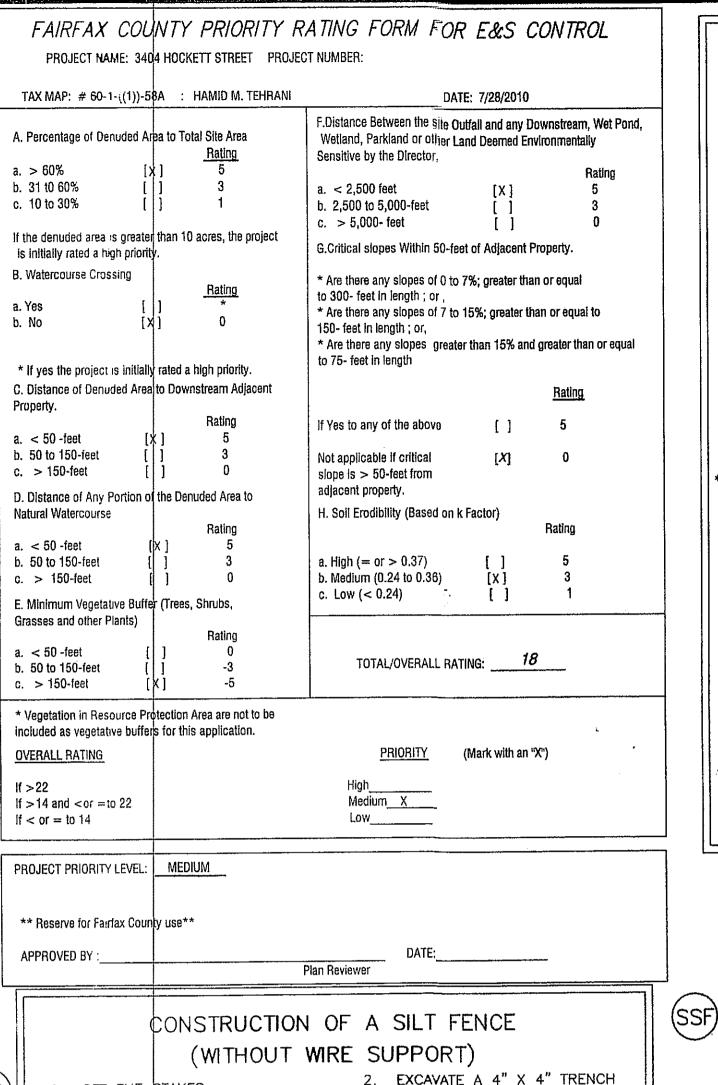
ONE-HALF (1/2) THE HEIGHT OF THE FENCE. SILT FENCES AND SUPER SILT FENCES WILL BE CHECKED REGULARLY AND DAMAGED FENCES WILL BE REPAIRED OR REPLACED IMMEDIATELY. 5. THE MATERIAL REMOVED FROM THE EROSION AND SEDIMENT CONTROL STRUCTURES MAY BE DISPOSED OF BY SPREADING THE MATERIAL ON-SITE OR BY HAULING IT AWAY, IF NOT

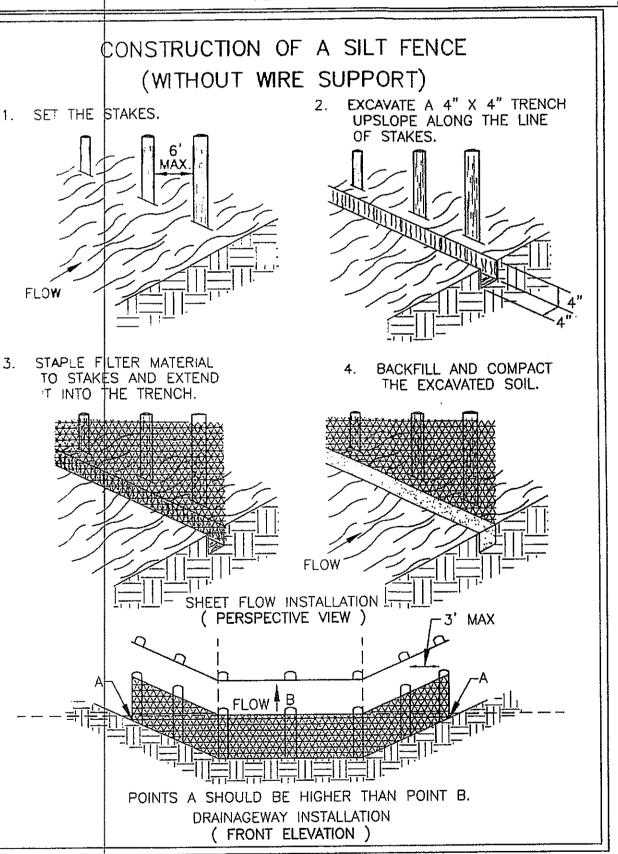
6. NO AREA SHALL BE LEFT DENUDED FOR A PERIOD LONGER THAN SEVEN (7) DAYS EXCEPT FOR THAT PORTION OF THE SITE IN WHICH WORK WILL BE CONTINUOUS BEYOND SEVEN (7) DAYS. IN THE EVENT SUCH MAXIMUM PERIOD IS EXCEEDED AND ANY SUCH AREAS REMAIN EXPOSED WITHOUT COVER, THE COUNTY WILL (IN THE EVENT THE DEVELOPER OR BUILDER DOES NOT) INSTALL THE NECESSARY TEMPORARY OR PERMANENT VEGETATIVE STABILIZATION MEASURES TO ACHIEVE ADEQUATE EROSION AND SEDIMENT CONTROL.

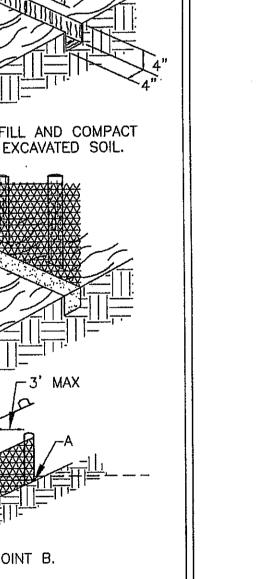
7. NO SEDIMENT CONTROL STRUCTURES SHALL BE REMOVED WITHOUT APPROVAL OF THE FAIRFAX COUNTY SITE INSPECTOR

CALL "MISS UTILITY"

TELEPHONE 1-800-552-7001FOR UTILITY LOCATION AT LEAST 48 HOURS BEFORE BEGINNING CONSTRUCTION.







4. BACKFILL AND SOMPACT THE 3. ATTACH THE FILTER FABRIC TO THE WIRE EXCAVATED SOIL FENCE AND EXTEND IT INTO THE TRENCH.

Source: Adapted from Installation of Straw and Fabric Filter

Barriers for Sediment Control, Sherwood and Wyant

STONE CONSTRUCTION ENTRANCE

SIDE ELEVATION

WASHRACK

POSITIVE DRAINAGE

TO SEDIMENT

PLAN VIEW

SECTION A-A

CONSTRUCTION OF A SILT FENCE

(WITH WIRE SUPPORT)

2. STAPLE WIRE FENCING TO THE POSTS.

TRAPPING DEVICE

70' MIN.

- EXISTING GROUND

COURSE AGGREGATE

MUST EXTEND FULL WIDTH

OF INGRESS AND EGRESS

FILTER CLOTH

REINFORCED' CONCRETE

. SET POSTS AND EXCAVATE A 4"X4"

TRENCH UPSLOPE ALONG THE LINE

PAVEMENT

-MOUNTABLE BERM

LEXISTING

PAVEMENT.

10' MIN.

____3" MIN.

GENERAL LAND CONSERVATION NOTES

1. NO DISTURBED AREA, WHICH IS NOT ACTIVELY BEING WORKED, SHALL REMAIN DENUDED FOR MORE THAN 7 CALENDAR DAYS UNLESS OTHERWISE AUTHORIZED BY THE DIRECTOR.

2. ALL E&S CONTROL MEASURES APPROVED WITH THE PHASE 1 E&S CONTROL PLAN SHALL BE PLACED AS THE FIRST STEP IN GRADING.

3. ELECTRIC POWER, TELEPHONE AND GAS SUPPLY TRENCHES SHALL BE COMPACTED, SEEDED AND MULCHED WITHIN 7 DAYS AFTER

4. ALL SOIL STOCKPILES, IF ANY, SHALL BE SEEDED AND MULCHED WITHIN 7 DAYS AFTER GRADING.

SHALL BE REMOVED AND ALL DENUDED AREAS SHALL BE STABILIZED.

5. DURING CONSTRUCTION, ALL STORM SEWER INLETS SHALL BE PROTECTED BY SEDIMENT TRAPS, MAINTAINED AND MODIFIED DURING CONSTRUCTION PROGRESS AS REQUIRED.

6. ANY DISTURBED AREA NOT COVERED BY PFM ARTICLE 11-0406.1 AND NOT PAVED, SODDED OR BUILT UPON BY NOVEMBER 1, OR DISTURBED AFTER THE DATE, SHALL BE MULCHED IMMEDIATELY WITH HAY OR STRAW MULCH AT THE RATE OF 2 TONS/ACRE (4,483 KG/HA) AND OVER-SEEDED BY APRIL 15.

7. AT THE COMPLETION OF ANY PROJECT CONSTRUCTION AND PRIOR TO BOND RELEASE, ALL TEMPORARY SEDIMENT CONTROLS

APPROVER SE SP PLAN SEE DEV COND DATED 6/14/2011 Date of (BOS) (BZA) approval 6/21/2011

Plate 3.05-1

STREET

KETT

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HAMID HAMID ○ MOGHAVEMI-TEHRANI → DESIGNED BY:

SDE, INC.

DRAWN BY: B.H.

CHECKED BY:

HAMID T.. PE

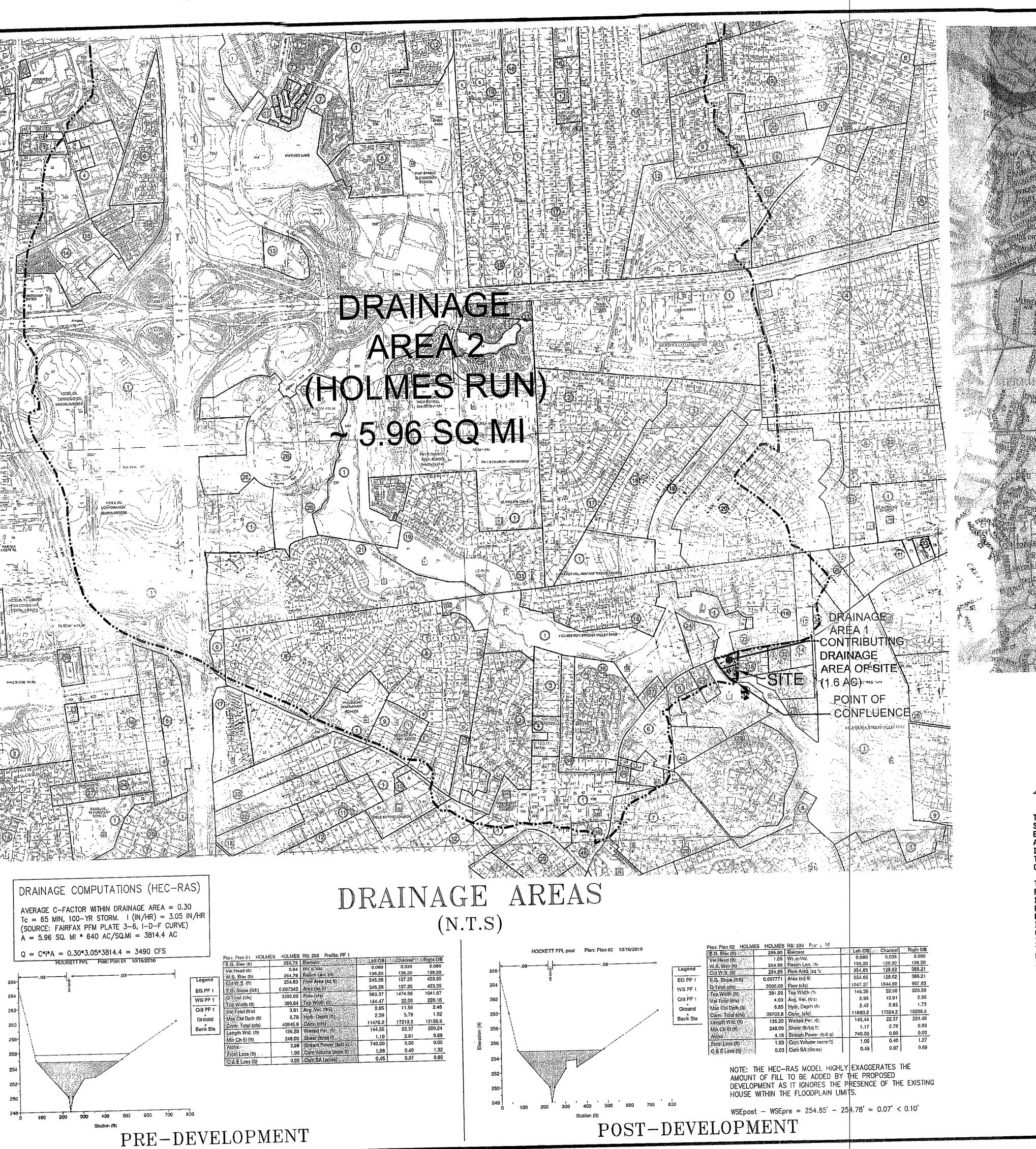
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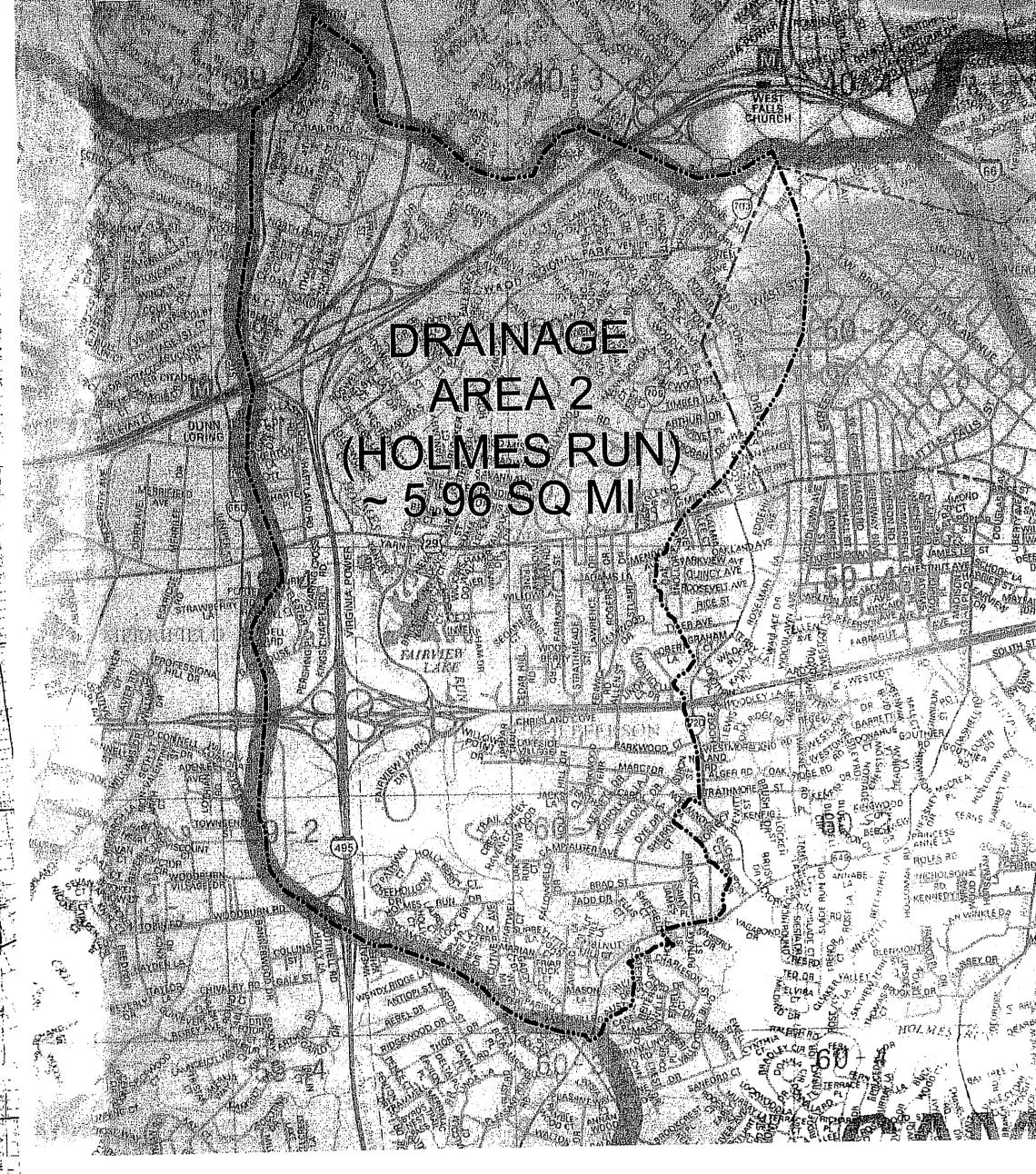
DATE: 03/23/201

PROJECT/FILE #

SHEET NUMBER

5 OF 7





OVERALL DRAINAGE AREA FROM FAIRFAX COUNTY WATERSHEDS MAP (N.T.S)

ADEQUATE OUTFALL NARRATIVE

Application No. SE-2009-MA-026 Staff W.O.D

APPROVED SE SP PLAN

SEE DEV COND DATED 6/14/2011

Date of (BOS) (BZA) approval 6/21/2011

Sheet 7 of ______ 11

THE SITE CONSISTS OF 0.500 AC. OF TOTAL SITE AREA. THE WESTERN PORTION OF THE PROPERTY SHEET FLOWS DIRECTLY INTO HOLMES RUN WHICH IS ADJACENT TO THE PROPERTY AND THE EASTERN PORTION OF THE SITE SHEET FLOWS IN A GENERALLY SOUTH-EASTERLY DIRECTION INTO A SWALE ALONG HOCKETT STREET AND THEN IMMEDIATELY INTO HOLMES RUN. THE TOTAL DRAINAGE AREA OF THE SITE INCLUDING OFF-SITE FLOW INTO THE SITE COMPRISES OF 1.6 ACRES. THIS UPSTREAM AREA CONSISTS ENTIRELY OF THE UNDCCUPIED LOT 58 OWNED BY THE FAIRFAX COUNTY PARK AUTHORITY.

THE SITE CURRENTLY GENERATES A TOTAL 10-YR RUNOFF OF 1.57 CFS WITH AN AVERAGE "C" FACTOR OF 0.43, AND AFTER THE REMOVAL OF THE DRIVEWAY AND PATIO PORTIONS THE TOTAL 10-YR RUNOFF WILL BE 1.28 CFS WITH AN AVERAGE "C" FACTOR OF 0.35. ACCORDING TO THE FAIRFAX COUNTY PUBLIC FACILITIES MANUAL CODE 6-0203.2B, THE DOWNSTREAM DRAINAGE SYSTEM MUST BE PROVEN ADEQUATE UP TO A POINT OF CONFLUENCE AT WHICH THE TOTAL DRAINAGE AREA OF THE SITE. THE CONTRIBUTING DRAINAGE AREA OF THE SITE. THE CONTRIBUTING DRAINAGE AREA OF THE SITE IS 1.6 ACRES AND AT THE POINT OF CONFLUENCE IMMEDIATELY OFF THE SITE, THE TOTAL DRAINAGE AREA IS APPROXIMATELY 5.95 SQUARE MILES WHICH IS AT LEAST 100 TIMES THE CONTRIBUTING DRAINAGE AREA. THE EXISTING SWALE ALONG WHICH IS AT LEAST 100 TIMES THE CONTRIBUTING DRAINAGE AREA. THE EXISTING SWALE ALONG HOCKETT STREET IS ADEQUATE FOR THE EXISTING RUNOFF AND THE AMOUNT OF RUNOFF WILL NOT INCREASE. THE MAJORITY OF THE CONTRIBUTING AREA SHEET FLOWS INTO EITHER HOLMES RUN OR INTO THE SWALE AND THIS WILL REMAIN UNCHANGED. THEREFORE, IT IS THE OPINION OF THE ENGINEER THAT ADEQUATE OUTFALL EXISTS FOR THIS SITE.

STORMWATER MANAGEMENT CERTIFICATION

THE SITE IS LOCATED ENTIRELY WITHIN AN EXISTING FLOOD PLAIN OF HOLMES RUN THE IMPERVIOUS AREA WILL DECREASE AS COMPARED TO THE EXISTING CONDITIONS. THIS WILL BE ACHIEVED BY REMOVING A LARGE PORTION OF THE EXISTING DRIVEWAY AS WELL AS PATIOS AND WALKWAYS. IN THE FINAL POST-DEVELOPMENT CONDITIONS, THE TOTAL IMPERVIOUS PERCENTAGE OF THE LOT WILL BE LOW (15.8%), AND STORMWATER STORAGE OR INFILTRATION WILL NOT BE FEASIBLE IN AN AREA SUSCEPTIBLE TO REGULAR FLOODING AND RELATIVELY CLOSE TO THE EXISTING WATER TABLE.

VOINEERS PLANNERS ARCHITECTS LANDSCA 7777 LEESBURG PIKE, SL

A, MASON RD

WATER FEMENT TFALL LYSIS

HAMID HAMID LIC. No. 23137

DESIGNED BY: SDE, INC.

DRAWN BY: B.H

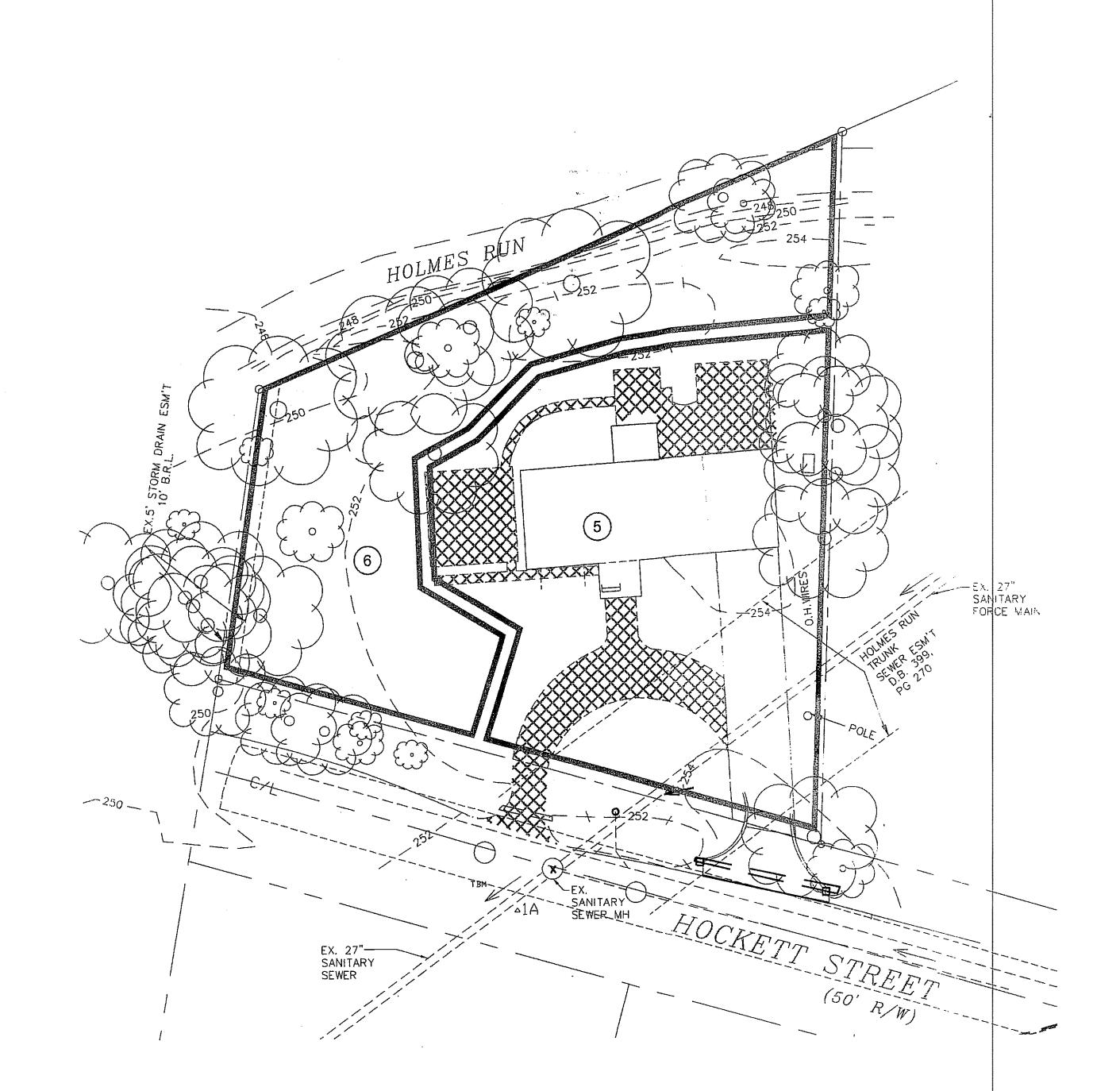
CHECKED BY: HAMID T., PE

SCALE:

DATE: 03/23/2011

PROJECT/FILE #

SHEET NUMBER 6 OF 7



		EVM SU	MMARY TABLE	=		
	Cover Type	Primary Species	Successional Stage	Condition	Acreage	Comments
5	Developed Land	Few evergreen plantings in lawn areas.	ก.ล.	poor	0.27 aç.	This Cover Type exists as lawn area around homesites as well as areas currently being used for parking and driveway. There are a few scattered evergreen trees and hardwoods present.
6	Maintained Grasslands	Scattered red maple, pine, hickory and oaks in lawn areas. Evasive bamboo along creek bank	n.a.	poor	0.23 ac.	This Cover Type exists as lawn area and landscaped areas with scattered trees in lawn area. Existing trees dead or dying back due to lack of maintenance and evasive vines competition.

TREE PRESERVATION TARGET CALCULATIONS AND STATEMENT (TABLE A1)

PRE-DEVELOPMENT AREA OF EXISTING TREE CANOPY	7,000 SF (0	.16 AC)
PERCENTAGE OF GROSS SITE AREA COVERED BY EXISTING TE	REE CANOPY	32.1%
PERCENTAGE OF 10-YEAR TREE CANOPY REQUIRED FOR SITE	(R-4)	25%
PERCENTAGE OF CANOPY REQUIREMENT THAT SHOULD BE METHROUGH TREE PRESERVATION	:T	8.0%
PERCENTAGE OF CANOPY REQUIREMENT THAT WILL BE MET THROUGH TREE PRESERVATION		8.9%
HAS THE TREE PRESERVATION TARGET BEEN MET?		YES

LEGEND:

EXIS

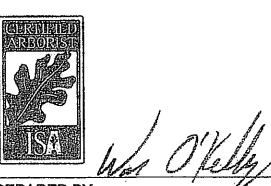
Application No. <u>SE-2009-MA-026</u> Staff <u>W.O.D.</u>

APPROVED SE SP PLAN

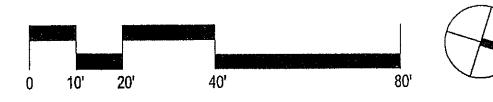
SEE DEV COND DATED <u>6/14/2011</u>

Date of (BOS) (BZA) approval <u>6/21/2011</u>

Sheet <u>8</u> of <u>11</u>

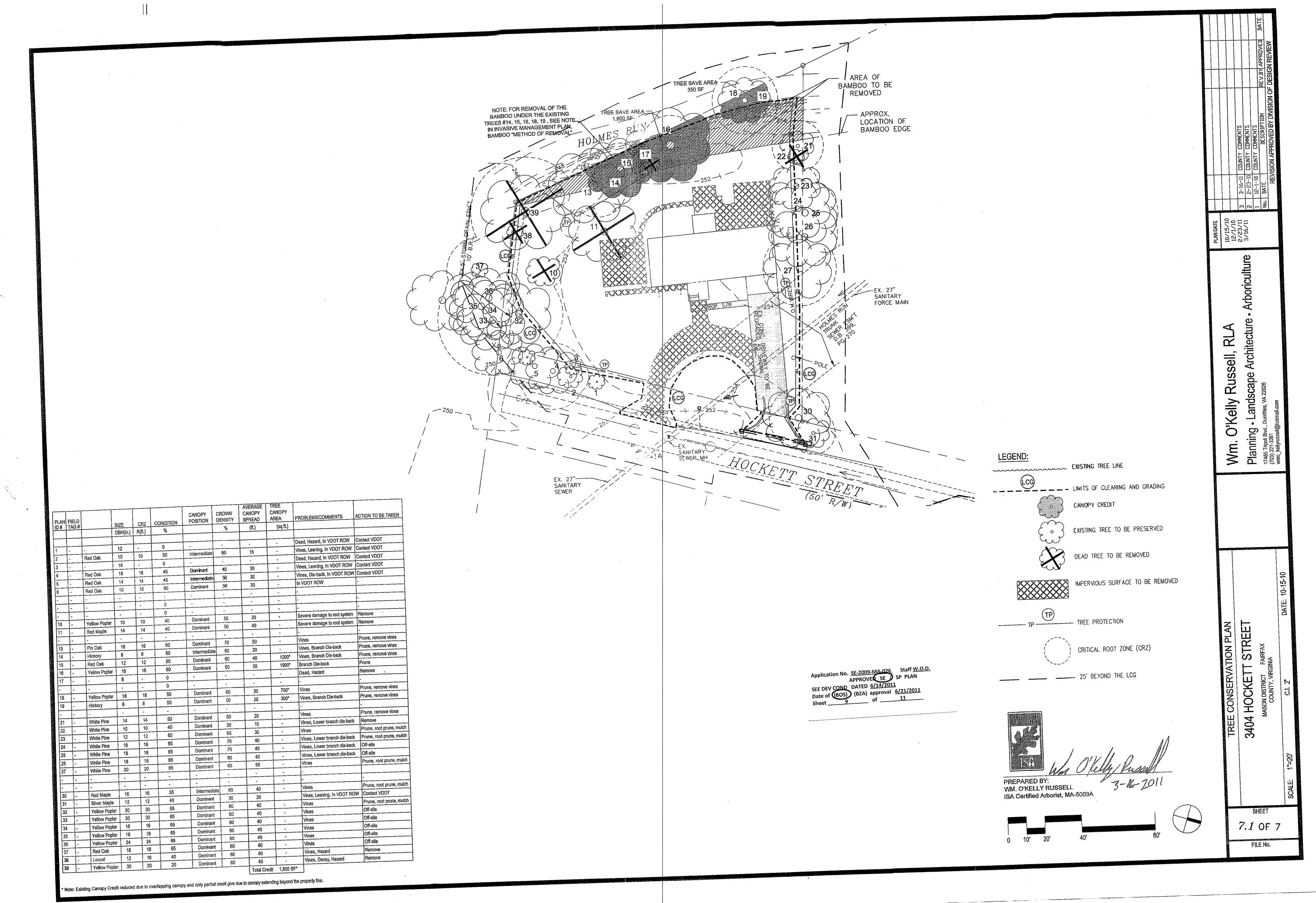


PREPARED BY:
WM. O'KELLY RUSSELL
ISA Certified Arborist, MA-5009A



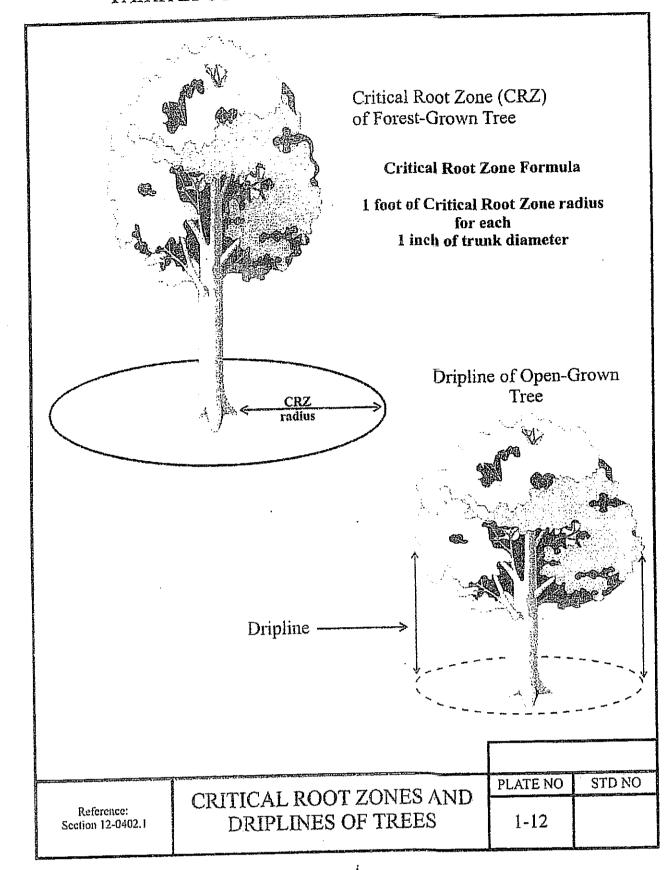
PLAN DATE	10/15/10 12/1/10 2/23/11 3 3-16-11 CHINTY CHMMFNTS	2 2-23-11 COUNTY COMMENTS 1 12-1-10 COUNTY COMMENTS	No. DATE DESCRIPTION REV.BY A REVISION APPROVED BY DIVISION OF DESIGN	
	VIII. O NGIII AUSSGII, ALA	17485 Tripoli Blvd., Dumfiles, VA 22026	(703) 221-3381 wmo_kellyrussell@hotmail.com	· 医动物结肠 计分类 医多种
EXISTING VEGETATION MAP	3404 HOCKETT STREET	MASON DISTRICT FAIRFAX COUNTY, VIRGINIA	C.I. 2' DATE: 10-15-10	

FILE No.

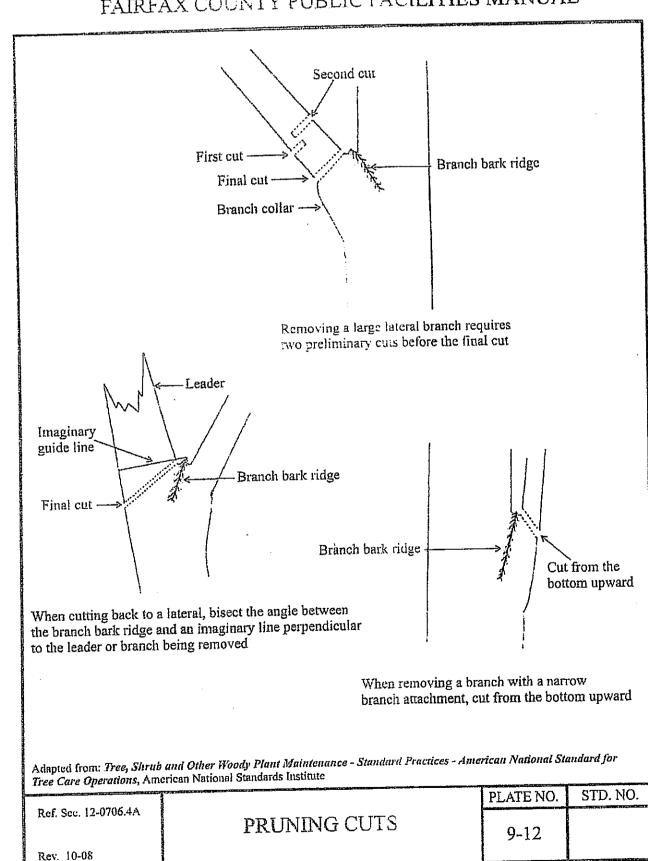


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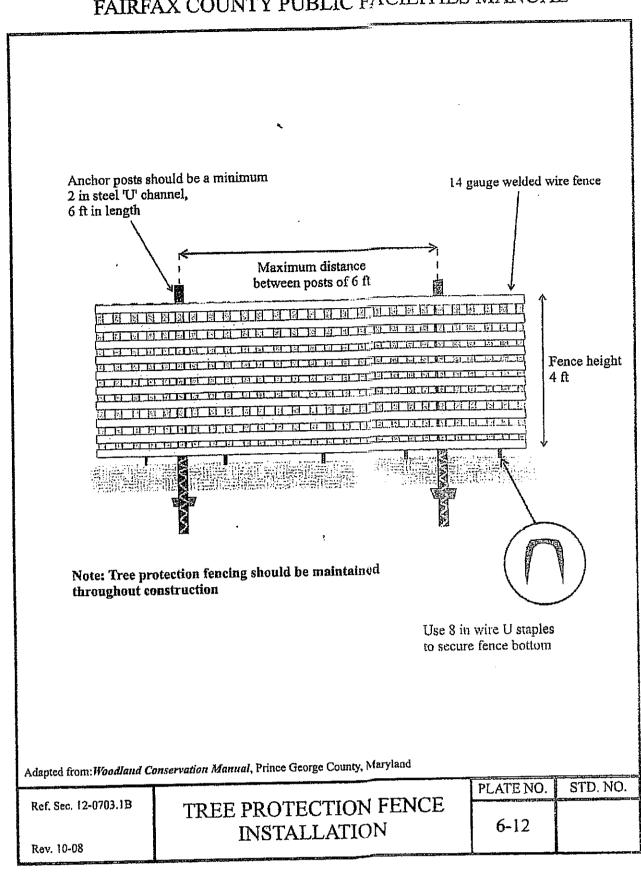
FAIRFAX COUNTY PUBLIC FACILITIES MANUAL

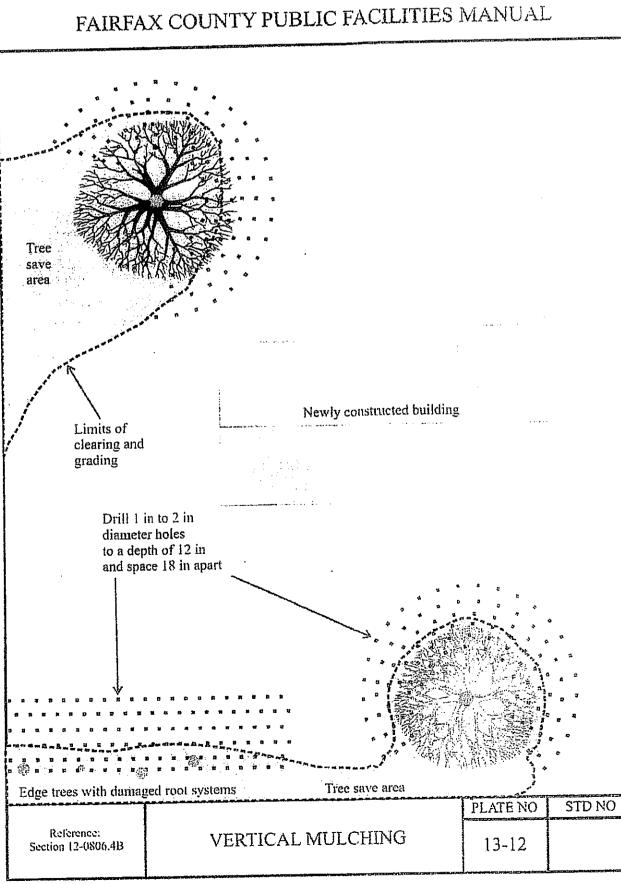


FAIRFAX COUNTY PUBLIC FACILITIES MANUAL

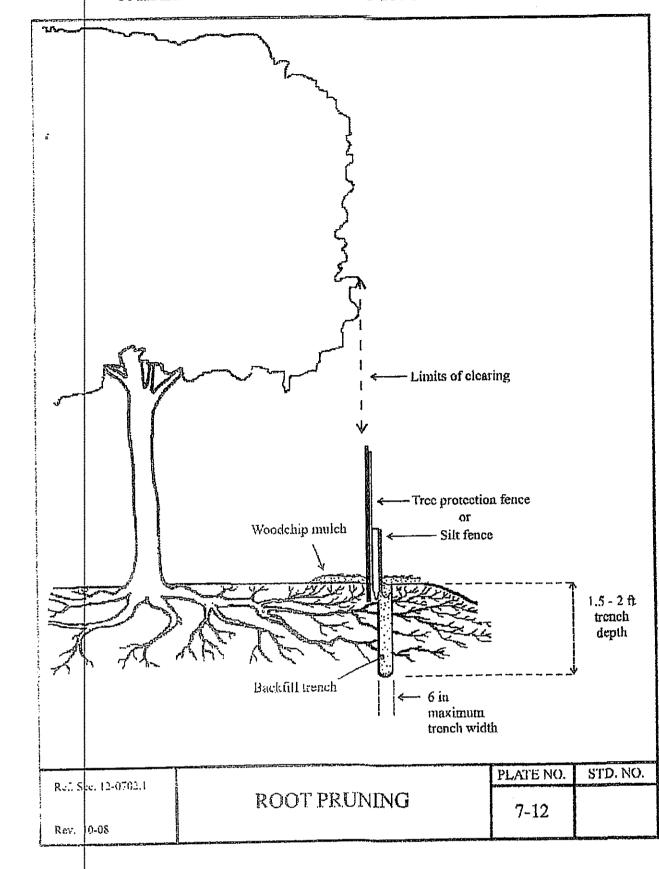


FAIRFAX COUNTY PUBLIC FACILITIES MANUAL





FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



i	12-0000 TREE CONSER	VATION	·
0510. nopy F	IJ (1) Table 12.12 is provided as a template to f Requirements and presenting the calculations in	acilitate calcu Tree Conserv	alating 10-year Tree ation Plans.
able 1	2.12 10-year Tree Canopy Calculation Work	sheet Totals	Reference
t ≑ P	; 	Lotais	Kefelence
	reservation Target and Statement		
51	lace the Tree Preservation Target calculations and laternent here preceding the 10-year tree canopy alculations	SEE TABLE A1	see § 12-0507.2 for list of required clamonts and worksheet
	······································		t to the second second
Tree (Canopy Requirement		
<u> </u>	Identify gross site area =	21,784 SF	§ 12-0510.1A
2	S. Jennet area dedicated to parks, mad frontage, and [0 SF	§ 12-0510.1B
5	Subtract area of ecomptions a	0 SF	§ 12-0510.1C(1)
			through § 12-0510.1C(6)
1	Adjusted gross sile area (B1 - B2) -	21,784 SF	
5	Identify size's zoning and/or use	R-4	§ 12-509.1 and Table
6	Percentage of 10-year tree canopy required =	25%	12.4
7	Area of 10-year tree canopy required (B4 x B5) =	5,446 SF	
8	Modification of 10-year Tree Canopy Requirements	NO	Yes or No
ľ	requested?		
9	If B8 is yes, then list plan sheet where modification	*	Sheet number
	request is located	L	<u> </u>
		<u></u>	The second second
	Preservation Tree Preservation Target Area =	560 SF	
1	Total canopy area meeting standards of § 12-0200 =		
3	C2 x 1.25 =	•	§ 12-0509,3B
4	Total canony area provided by unique or valuable forest		
	or woodland communities		
5	C4 x 1.5 =	·	§ 12-0509.3B(1)
6	Total of canopy area provided by "Heritage."	_	
	"Memorial," "Specimen," or "Street" trees =		§ 12-0509.3B(2)
7	C6 x 1.5 to 3.0 = Canopy area of trees within Resource Protection Areas		9 12 03 03 13 12 (2)
:8	and 100-year floodplains =	1,950 SF	
9	C8 x 1.0 =	1,950 SF	§ 12-0509.3C(1)
1		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
10	Total of C3, C5, C7 and C9 =	1,950 SF	If area of C10 is less than B7 remainder of requirement must be mut through tree planting - go to D
		2 5 5 4 3 5	1 go to b
	12-0000 TREE CONSE	RVATION	<u> </u>
D3	x 1.5 =		§ 12-0509.4B(1)
D4	Area of canony planted for energy conservation =	•	0.10.0600.40(0)
D5	x 1.5 =	"	§ 12-0509.4B(2)
D6	Area of canopy planted for water quality benefits	<u> </u>	§ 12-0509.4B(3
D7	x 1.25 =		8 12-030340(3
D8	Area of canopy planted for wildlife benefits = x 1.5 =	=	§ 12-0509.4B(4)
D9	Area of canopy provide by native trees =		
DIO	x 1.5=	= -	§ 12-0509,4B(5)
D11 D12	Area of canopy provided by improved cultivars and		
71.71	varieties =	<u> </u>	
D13	X1.25		§ 12-0509.4B(6)
DI4	Area of canopy provided through tree seedlings = x1.6	-	§ 12-0509.4D(1)
	Area of canopy provided through native shrubs o		§ 12-0509.4D(1)(a)
D15	Area of canopy provided through native shous o woody seed mix	-	
	x1.	0 -	§ 12-0509.4D(1)(a)
D16	Percentage of D14 represented by D15	-	Must not exceed 33% of
			D14
D17	Total of canopy area provided through tree planting	- 1 10,325 SF	Yes or No
D18	ls an offsite planting relief requested Tree Bank or Tree Fund	2 NO	§ 12-0511
D19			4.7-071
D20	Canopy area requested to be provided through offsit banking or tree fun	e NO	1
Dat	Amount to be deposited into the Tree Preservation an	d	
D21	Planting Fun	ict t	
 			
E. To	tal of 10-year Tree Canopy Provided		
El	Total of canopy area provided through tree preservation	en	
_^^	(C10)	= 1,900 ac	
E2	Total of canopy area provided through tree plantin	10 225 05	
	(D17)		
E3	Total of canopy area provided through offsi mechanism (D19)	-	
E4	Total of 10-year Tree Canopy Provided	= 12,275 SF	Total of E1 through E3.
1 24	10th of 10-Jon Free cauch) contain	1 12,210 37	Area should meet or

exceed area in B6

TREE PRESERVATION NOTES:

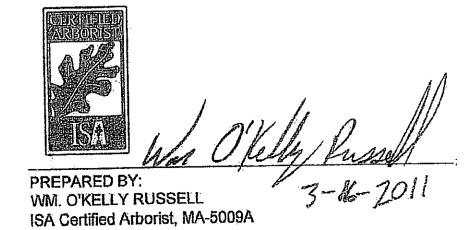
- 1. THE LIMITS OF CLEARING AND GRADING SHALL BE ACCURATELY FLAGGED PRIOR TO ANY CONSTRUCTION ACTIVITY ON-SITE.
- ALL INDIVIDUAL TREES TO BE SAVED WILL BE TAGGED APPROPRIATELY WITH BRIGHTLY-COLORED SURVEYOR'S RIBBON AT A HEIGHT OF 5'-6'.
- TREE PROTECTION FENCE SHALL BE INSTALLED IN THE FIELD IN CONJUNCTION WITH THE COUNTY'S URBAN FORESTER. PROTECTION FENCE IS SUBJECT TO RELOCATION BASED UPON THE URBAN FORESTER'S REVIEW. FINAL APPROVAL BY THE URBAN FORESTER MUST BE OBTAINED PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITIES.
- TREE PROTECTION FENCE SHALL BE INSTALLED AT THE DRIPLINE OF THE TREES TO BE PRESERVED, OR AT THE LIMITS OF CLEARING AND GRADING, WHICHEVER IS A GREATER DISTANCE FROM THE TRUNK OF THE TREE TO BE PRESERVED. NOTE THAT THERE MAY BE TREES WHERE THE TREE PROTECTION FENCE MAY BE SLIGHTLY WITHIN THE DRIPLINE LIMITS. SEE THIS SHEET FOR DETAILS OF THE TREE PROTECTION TO BE UTILIZED.
- 5. VEHICULAR TRAFFIC AND THE STOCKPILING OF ANY CONSTRUCTION MATERIALS. INCLUDING TOPSOIL STOCK PILES, IS PROHIBITED WITHIN THE DRIP LINE OF ANY TREES TO BE SAVED.
- 6. ROOT PRUNING IS TO BE PERFORMED WHEREVER GRADES WILL BE ALTERED WITHIN THE ROOT ZONE OF A TREE TO BE PRESERVED. THE ENTIRE AREA OF ROOT PRUNING IS TO BE COMPLETED IN ONE OPERATION. ROOT PRUNING MACHINERY SHALL BE USED TO A DEPTH OF 18". IF A TRENCHER IS USED, THE TRENCH SHALL BE BACKFILLED IMMEDIATELY TO PREVENT ROOT DEHYDRATION. WHENEVER POSSIBLE, ROOT PRUNING TRENCHES SHOULD BE MULCHED WITH WOOD CHIPS OR MULCH TO A DEPTH OF FOUR INCHES.
- 1-2 INCHES OF MULCH SHALL BE SPREAD AT THE LIMITS OF CLEARING AND GRADING AND A ROOT BIO-STIMULANT SHALL BE APPLIED TO THE ROOTS SYSTEMS IN THIS AREA BY A LICENSED TREE CARE PROFESSIONAL, AND/OR CERTIFIED ARBORIST.
- MULCH AS GREAT AN AREA AS POSSIBLE AROUND TREE TO RETAIN MOISTURE, INCREASE FERTILITY OF SOIL, PROTECT ROOTS IN WINDER AND HASTEN ROOT
- WATER TREES WELL DURING JUNE, JULY AUGUST, AND SEPTEMBER.
- 10. A PRIVATE CERTIFIED ARBORIST SHALL BE REQUIRED TO IMPLEMENT, OVERSEE, AND MONITOR SITE WORK AS IT AFFECTS TREES DURING THE LIFE OF THE PROJECT. MONITORING OF THE PRESERVED TREES SHALL BE CONDUCTED ON A WEEKLY BASIS DURING THE INITIAL PHASES OF CONSTRUCTION. THE GENERAL CONTRACTOR SHALL BE SUBJECT TO REQUIREMENTS OF THE COUNTY'S URBAN FORESTER AS IT RELATES TO PRESERVATION MEASURES.
- 11. TREES BEING REMOVED SHALL NOT BE FELLED, PUSHED OR PULLED INTO TREES BEING RETAINED. WHEN TREES TO BE REMOVED ARE IN VERY CLOSE PROXIMITY TO TREES TO BE PRESERVED, THEY SHALL BE FELLED BY HAND, WITH A CHAIN SAW.
- 12. EQUIPMENT OPERATORS SHALL NOT CLEAN ANY PART OF THEIR EQUIPMENT BY SLAMMING IT AGAINST THE TRUNKS OF TREES TO BE RETAINED.
- 13. TRENCHING SHALL BE DONE AS FAR AWAY FROM THE TRUNKS OF TREES AS POSSIBLE.
- 14. ROOTS EXPOSED BY TRENCHING SHALL NOT BE LEFT EXPOSED TO AIR. THEY SHALL BE COVERED WITH SOIL AS SOON AS POSSIBLE OR PROTECTED AND KEPT MOISTENED WITH WET BURLAP OR PEAT MOSS UNTIL THE TRENCH CAN BE FILLED.
- 15. THE ENDS OF DAMAGED AND CUT ROOTS SHALL BE CUT OFF SMOOTHLY.
- 16. ALL WORK SHALL CONFORM TO THE FAIRFAX COUNTY PUBLIC FACILITIES MANUAL AND THE APPROVED TREE PRESERVATION PLAN.
- 17. SEE EROSION-SILTATION CONTROL PLANS (PHASE 1 AND 2) FOR CONSTRUCTION SEQUENCING AND ADDITIONAL CONTROLS.
- 18. FOR ALL TREES TO BE REMOVED, REMOVAL OF THE TREES SHALL BE DONE BY HAND WITH A CHAIN SAW, AND NO HEAVY MACHINERY SHALL BE LOCATED OUTSIDE OF THE LOD. TREES REMOVED WILL BE CUT TO APPROXIMATELY THE EXISTING GRADE.
- 19. REMOVAL OF DEBRIS LOCATED OUTSIDE THE LIMITS OF DISTURBANCE (LOD), SHALL BE REMOVED IN A MANNER WHICH DOES NOT REQUIRE THE FOOT PRINT OF ANY MACHINERY USED, TO BE LOCATED OUTSIDETHE LOD. NO MACHINERY SHALL BE ALLOWED INTO TREESAVE AREAS WITHOUT PRIOR WRITTEN APPROVAL FROM THE FAIRFAX COUNTY URBAN FORESTER.
- 20. TREES LOCATED WITHIN THE VDOT R.O.W., SHALL BE THE RESPONSIBILITY OF VDOT. VDOT SHALL BE NOTIFIED IN WRITING, BY THE HOMEOWNER, OF ANY TREES THAT ARE DEAD OR IN HAZARDOUS CONDITION, ADJACENT TO THE FRONTAGE OF THE PROPERTY.

TREE PRESERVATION TARGET CALCULATIONS AND STATEMENT

(TABLE A1)		
PRE-DEVELOPMENT AREA OF EXISTING TREE CANOPY	7,000 SF	(0.16 AC)
PERCENTAGE OF GROSS SITE AREA COVERED BY EXISTING TR	REE CANOF	PY 32.1%
PERCENTAGE OF 10-YEAR TREE CANOPY REQUIRED FOR SITE	(R-4)	25%
PERCENTAGE OF CANOPY REQUIREMENT THAT SHOULD BE ME THROUGH TREE PRESERVATION	ET	8.0%
PERCENTAGE OF CANOPY REQUIREMENT THAT WILL BE MET		8.9%
THROUGH TREE PRESERVATION HAS THE TREE PRESERVATION TARGET BEEN MET?		YES

TREE CANOPY COVER REQUIREMENTS

GROSS SITE AREA ZONING TREE CANOPY COVER REQUIRED (21,780 SF X 25%)	21,784 SF (0.50 AC.) R-4 5,445 SF
TREE CANOPY COVER PROVIDED: LANDSCAPE PROVIDED TREE SAVE AREA	10,325 SF (47.4 %) 1,950 SF (8.9 %)
TOTAL	12,275 SF (56.3 %)



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